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Introduction to the NAHRS and List of Reference Materials

Purpose and Scope of the National Animal Health Reporting System (NAHRS):

The National Animal Health Reporting System (NAHRS) is a joint project of the U.S. Animal Health Association (USAHA), the American Association of Veterinary Laboratory Diagnosticians (AAVLD), and the USDA:Animal and Plant Health Inspection Service (APHIS). The NAHRS was designed to provide data from chief State animal health officials on the presence of confirmed clinical disease in specific commercial livestock, poultry and aquaculture species in the U.S. It is intended to be only one part of a comprehensive and integrated animal health information system.

The NAHRS List server:

A list server is available for discussion and posting of materials associated with the NAHRS. Membership is limited to individuals directly involved with the NAHRS. To join the list server send your e-mail address to either Dr. Jim Case at jcase@cvdls.ucdavis.edu or Dr. Stan Bruntz at stanley.d.bruntz@usda.gov and ask to be added to NAHRS-L.

Useful reference materials for the NAHRS:

Center for Animal Health Monitoring (CAHM) Web site:

<http://www.aphis.usda.gov/vs/ceah/cahm> follow link to NAHRS on top of the page.

OIE publications may be viewed on line or ordered through their world wide web site at www.oie.int.

OIE *International Animal Health Code*, latest edition.

OIE *Manual of Standards for Diagnostic Tests and Vaccines*, latest edition.

OIE *International Aquatic Animal Health Codes*, latest edition.

OIE *Diagnostic Manual for Aquatic Animal Diseases*, latest edition.

American Association of Avian Pathologists' Laboratory Manual for the Isolation and Identification of Avian Pathogens, latest edition.

USDA:APHIS 91-55-031 *National Poultry Improvement Plan*, April 1996.

Code of Federal Regulations, Section 9.

Acknowledgments:

The USDA:APHIS:VS Centers for Epidemiology and Animal Health (CEAH) thank the NAHRS Steering Committee, the NAHRS Commodity Working Groups, and the NAHRS Pilot States (AL, CA, IL, NE, NJ, SC, TX) for all of their hard work in the successful development of the NAHRS.

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Answers to Frequently Asked Questions about the NAHRS

- 1) What is the NAHRS? The National Animal Health Reporting System (NAHRS) is a cooperative effort between the American Association of Veterinary Laboratory Diagnosticians (AAVLD), the U.S. Animal Health Association (USAHA) and USDA's Animal and Plant Health Inspection Service (APHIS). Decisions are made by a joint steering committee.
- 2) What is the purpose of the NAHRS program? The NAHRS was designed to provide data on the presence of confirmed clinical disease in commercial livestock, poultry and aquaculture species in the U.S. The NAHRS provides data for reports required by the Office International des Epizooties (OIE) from member countries.
- 3) Is the NAHRS the only source of data for completing the annual OIE report? No, the NAHRS is not the only source of information used to complete the OIE report. The NAHRS was designed to be only one part of a comprehensive and integrated U.S. animal health information system.
- 4) How were the NAHRS diseases chosen? Since the NAHRS was designed to supply data for our OIE reports, the diseases are those included on the OIE list A and B diseases for cattle, small ruminants, horses, swine, commercial poultry, and commercial aquaculture. Future plans are to also include the list B diseases for crustaceans, lagomorphs, bees, and molluscs.
- 5) What are the potential benefits of participating in the NAHRS? Participation in the NAHRS will strengthen your State's internal disease surveillance abilities and enable your animal industries to provide information needed for international trade.
- 6) What are the costs of participating in the NAHRS? Costs are associated with collection and validation of information on cases of clinical disease in your State. The average time needed to complete the monthly reports is estimated to be four hours a month.
- 7) How is the NAHRS program funded? No additional program funds are currently available. All pilot States were able to participate using their existing infrastructure.
- 8) If I consider the OIE list B diseases as 'monitored' or 'notifiable' in my State rather than 'reportable', will it create a problem with my international trade partners? Considering a disease as 'monitored' or 'notifiable' rather than 'reportable' should not create any problems. The important idea is that we are tracking disease occurrence and have an adequate infrastructure to identify and report disease in commercial livestock, poultry and aquaculture.
- 9) How will participation in the NAHRS affect confidentiality of the producers in my State? The NAHRS collects summary data of disease presence only. No individual owner or animal location information is submitted. Data are collected through and verified by chief State animal health officials (State Veterinarian) so there are no surprises in what is reported. The National annual summary does not identify individual State disease status.
- 10) How does the NAHRS relate to the poultry health status report provided for the Russian Federation and will I have to create both of these reports? If your State is one which provides a report to the Russians for poultry export, you will be able to use that report to help you in completing the commercial poultry section of the NAHRS report and vice versa.

11) Is the NAHRS a mandatory program? Participation in the NAHRS is voluntary. To encourage all states to participate the USDA:APHIS:VS is currently evaluating a USAHA/AAVLD proposal that the NAHRS be defined as a cooperative, not voluntary, program for all industries and states that request USDA certification of animal products for export.

12) My State would like to participate in the NAHRS, but I do not have the support of my animal industry groups. What can I do to encourage their support? Educational materials on the NAHRS are available through the CEAH staff. APHIS staff and steering committee members are available to meet with industry groups and others to discuss the NAHRS and address their concerns.

13) How will disease reporting for wildlife and feral animals be covered under the NAHRS? The NAHRS is intended to report on commercial livestock, poultry and aquaculture. While disease information on wildlife or feral species may be reported to the system, this information is not included in the National annual summaries.

14) Will disease information on companion animals be reported to the NAHRS? No. The NAHRS was designed to collect data on commercial livestock, poultry, and aquaculture species. Definitions of commercial livestock, poultry, and aquaculture can be found in NAHRS Uniform Methods & Rules.

15) Who can answer my questions about the NAHRS program? A list of resources and mentors is included in this manual. Additional information can be found at the CAHM web site: <http://www.aphis.usda.gov/vs/ceah/cahm>, following link on the top of the page. If your questions are not answered by these FAQ's, please feel free to contact anyone on the list.

16) What are the sources of data for the NAHRS? Data sources include, but are not limited to, animal disease diagnostic laboratories, public health laboratories that test for zoonotic diseases, private practitioners, accredited veterinarians, fish and wildlife departments, extension veterinarians, universities, and veterinary teaching hospitals. Anyone who is able to provide you with verifiable animal health data should be considered a potential data source. Letters requesting test result information on animals from your State can be sent to out-of-State laboratories and laboratories from other agencies such as public health and fish and wildlife departments.

17) Who is responsible for collating the information by State? In a State, the chief State animal health official or their designee is responsible for collating the data. After the data have been submitted to CEAH, they generate the various verification and summary reports.

18) Do I have to report on all of the diseases on the NAHRS list (can I pick and choose)? Participation in the NAHRS is voluntary, however participating States need to report on ALL listed diseases for the industries in the State.

19) How do I report an endemic disease that doesn't fit the NAHRS case definition? The disease reporting criteria are intended as minimum guidelines. If you have a case which fits the reporting criteria, you must report the presence of confirmed clinical disease. If you have a case which does not meet the reporting criteria, you may use additional information to decide whether or not to report the presence of confirmed clinical disease to the NAHRS.

20) If I have a disease which is known to be widespread but is well controlled by vaccination and there have been no clinical cases, how do I report it? Again, you are only being asked to report the presence of confirmed clinical disease in your State.

21) What do I do about cases for which I don't have an answer at the time the NAHRS report is due (insufficient information)? Do not report it until you have an answer. Please remember to note the appropriate month for the disease report in the comments section.

22) How is commercial poultry defined? The NAHRS UM&R defines commercial poultry as domesticated fowl, including chickens, turkeys, waterfowl, and game birds, except doves and pigeons, which are maintained primarily for commercial production of eggs and meat. Backyard poultry are defined as domesticated fowl, including chickens, turkeys, waterfowl, and game birds, except doves and pigeons, which are maintained for hobby or non-commercial production of eggs and meat. The chief State animal health official may use the following criteria to define commercial for a State:

The Poultry Meat inspection act defines commercial as greater than 3,000 birds.

Criteria used by California as a pilot State consider the number of birds housed at a facility; the management of a facility, local marketing and commerce of birds or bird products originating from the facility; and the potential of international trade of birds or bird products originating from the facility.

23) How is commercial food fish defined? The NAHRS UM&R defines commercial food fish as those finfish maintained in captivity for the production of food. This definition excludes those finfish maintained for ornamental or exhibition purposes.

24) Who has the final say on what the NAHRS report for my state looks like? The chief State animal health official or his/her designee makes the final decision on data reported to the NAHRS for a State.

25) How often do I have to report to the NAHRS? The NAHRS is designed to gather data on a monthly basis. The steering committee and pilot States felt that monthly reporting was not too great a burden and decreased the possibility of recall errors.

26) What are the monthly time lines for NAHRS reporting? Disease data reports from previous month are due the middle of the month, preferably by the 15th.

27) Who gets to see the monthly NAHRS reports and will I get to see reports from other States? The monthly State reports are seen by the submitting State and designated CEAH staff. A summary of the monthly reports is seen by other APHIS staff for review.

28) Will NAHRS summary reports be by State/region or the nation as a whole? The data in the NAHRS National annual summary is currently by the nation as a whole.

29) How will the NAHRS data be reported? The NAHRS monthly State report requests information on the presence of individual diseases by commodity. The NAHRS is currently based on the presence rather than the amount of disease. A blank copy of the monthly State report form is included in the UM&R section of this manual or an electronic version can be obtained upon request from APHIS Technical Support. The NAHRS National annual summary

provides a summary of reports of presence by disease. A template of the National annual summary is included in the UM&R section of this manual.

30) What are the epidemiological uses of the NAHRS data? The data collected by the NAHRS are qualitative presence data and should be used accordingly. A positive report may be considered representative of the presence of confirmed clinical disease.

31) How do other countries do their reporting? A summary of the reporting systems in Australia, Canada, and Mexico can be found in the proceedings of the 1998 USAHA annual meeting under the Animal Health Information Systems Committee. The summary is also be posted on the USAHA web page at www.usaha.org.

32) Where can additional information be found on NAHRS? Additional information on NAHRS can be found at the Center for Animal Health and Monitoring (CAHM) web site: <http://www.aphis.usda.gov/vs/ceah/cahm>, follow the NAHRS link at the top of the page.

List of Diseases Reported to the NAHRS

OIE List A and B Diseases

LIST A

- A010-A018 Foot and Mouth Disease (FMD, Viruses O, A, C, SAT 1, SAT 2, SAT 3, Asia 1, or not typed), B, C/O, P
A020-A023 Vesicular Stomatitis (VS, Viruses Indiana, New Jersey, or not typed), B, E, P
A030 Swine Vesicular Disease, P
A040 Rinderpest, B, C/O
A050 Peste des Petits Ruminants, C/O
A060 Contagious Bovine Pleuropneumonia (*Mycoplasma mycoides mycoides*), B
A070 Lumpy Skin Disease, B
A080 Rift Valley Fever, B, C/O
A090 Bluetongue, B, C/O
A100 Sheep Pox and Goat Pox, C/O
A110 African Horse Sickness, E
A120 African Swine Fever, P
A130 Classical Swine Fever (Hog Cholera), P
A150 Fowl Plague (Highly Pathogenic Avian Influenza), CP
A160 Newcastle Disease (Exotic), CP

LIST B

MULTIPLE SPECIES

- B051 Anthrax (*Bacillus anthracis*), B, C/O, E, P
B052 Aujeszky's Disease (Pseudorabies), B, C/O, P
B053 Echinococcosis/Hydatidosis, B, C/O, P
B055 Heartwater (*Cowdria ruminantium*), B, C/O
B056 Leptospirosis, B, C/O, E, P
B057 Q Fever (*Coxiella burnetii*), B, C/O
B058 Rabies, B, C/O, E, P
B059 Paratuberculosis (Johne's Disease, *Mycobacterium avium paratuberculosis*), B, C/O
B060-61 New and Old World Screwworm (*Cochliomyia (Callitroga) hominivorax*, *Chrysomya bezziana*), B, C/O, E, P
B062 Trichinellosis (*Trichinella spiralis*), E, P

BOVINE (B)

- B101 Bovine Anaplasmosis (*Anaplasma marginale*, *A. centrale*)
B102 Bovine Babesiosis (*Babesia bovis*, *B. bigemina*)
B103 Bovine Brucellosis (*Brucella abortus*)
B104 Bovine Genital Campylobacteriosis (*Campylobacter fetus venerealis*)
B105 Bovine Tuberculosis (*Mycobacterium bovis*)
B106 Bovine Cysticercosis (*Cysticercus bovis* metacestode stage of *Taenia saginata*)
B107 Dermatophilosis (*Dermatophilus congolensis*)
B108 Enzootic Bovine Leukosis (BLV)
B109 Hemorrhagic Septicemia (*Pasteurella multocida*, serotypes B/Asian or E/African)
B110 Infectious Bovine Rhinotracheitis/ Infectious Pustular Vulvovaginitis (IBR/IPV)
B111 Theileriosis (*Theileria annulata*, *T. parva*)
B112 Trichomonosis (*Tritrichomonas (Trichomonas) foetus*)

- B113 Trypanosomosis (Tse-tse borne, *Trypanosoma congolense*, *T. vivax*, *T. brucei brucei*)
- B114 Malignant Catarrhal Fever (Bovine Malignant Catarrh, Wildebeest associated)
- B115 Bovine Spongiform Encephalopathy

CAPRINE AND OVINE (C/O)

- B151 Ovine Epididymitis (*Brucella ovis* infection)
- B152 Caprine and Ovine Brucellosis (excluding *B. ovis*)
- B153 Caprine Arthritis/Encephalitis
- B154 Contagious Agalactia (*Mycoplasma agalactiae*, *M. capricolum capricolum*, *M. putrefaciens*, *M. mycoides mycoides*, *M. mycoides mycoides* LC)
- B155 Contagious Caprine Pleuropneumonia (*Mycoplasma capricolum capripneumoniae*)
- B156 Enzootic Abortion of Ewes (Ovine psittacosis, *Chlamydia psittaci*)
- B157 Ovine Pulmonary Adenomatosis
- B158 Nairobi Sheep Disease
- B159 Salmonellosis (*Salmonella abortusovis*)
- B160 Scrapie
- B161 Maedi-Visna

EQUINE (E)

- B201 Contagious Equine Metritis (*Taylorella equigenitalis*)
- B202 Dourine (*Trypanosoma equiperdum*)
- B203 Epizootic Lymphangitis (*Histoplasma farciminosum*)
- B204 Equine Encephalomyelitis (Eastern {EEE} and Western {WEE})
- B205 Equine Infectious Anemia (EIA)
- B206 Equine Influenza (Virus Type A)
- B207 Equine Piroplasmiasis (Babesiosis, *Babesia (Piroplasma) equi*, *B. caballi*)
- B208 Equine Rhinopneumonitis (EVH-1 and EVH-4)
- B209 Glanders (*Pseudomonas mallei*)
- B210 Horse Pox
- B211 Equine Viral Arteritis (EVA)
- B212 Japanese Encephalitis
- B213 Horse Mange
- B215 Surra (*Trypanosoma evansi*)
- B216 Venezuelan Equine Encephalomyelitis (VEE)

PORCINE (P)

- B251 Atrophic Rhinitis of Swine (*Bordetella bronchiseptica*, *Pasteurella multocida*)
- B252 Porcine Cysticercosis (*Cysticercus cellulosae* metacestode stage of *Taenia solium*)
- B253 Porcine Brucellosis (*Brucella suis*)
- B254 Transmissible Gastroenteritis (TGE)
- B256 Enterovirus Encephalomyelitis
- B257 Porcine Reproductive and Respiratory Syndrome (PRRS)

COMMERCIAL POULTRY (CP)

- B301 Avian Infectious Bronchitis
- B302 Avian Infectious Laryngotracheitis (ILT)
- B303 Avian Tuberculosis (*Mycobacterium avium*)
- B304 Duck Virus Hepatitis (DVH)
- B305 Duck Virus Enteritis (DVE)
- B306 Fowl Cholera (Avian Pasteurellosis, *Pasteurella multocida*)
- B307 Fowl Pox
- B308 Fowl Typhoid (*Salmonella gallinarum*)
- B309 Infectious Bursal Disease (Gumboro Disease)
- B310 Marek's Disease
- B311 Avian Mycoplasmosis (*Mycoplasma gallisepticum*)
- B312 Avian Chlamydiosis (Psittacosis and Ornithosis, *Chlamydia psittaci*)
- B313 Pullorum Disease (*Salmonella pullorum*)

COMMERCIAL FOOD FISH (CFF)

- B401 Viral Hemorrhagic Septicemia
- B404 Spring Viremia of Carp
- B405 Infectious Hematopoietic Necrosis
- B413 Epizootic Hematopoietic Necrosis
- B415 *Oncorhynchus masou* Virus Disease

Proposed addition to NAHRS reporting of OIE list of notifiable Aquaculture diseases.

These will be reviewed by Aquaculture working group and reporting criteria defined. Proposed additions:

Disease of Crustaceans (OIE Diagnostic Manual for Aquatic Diseases):

- B445 Taura Syndrome (CH. 4.1.1.)
- B446 White Spot (CH. 4.1.2.)
- B447 Yellowhead (CH. 4.1.3.)

Diseases of Mollusks (OIE Diagnostic Manual for Aquatic Diseases):

- B431 Bonamiosis (*Bonamia ostreae* and *B. sp.* - CH 3.1.1.)
- B432 MSX Disease (*Haplosporidium nelsoni* and *H. costale* - CH 3.1.2.)
- B433 Perkinsosis (*Perkinsus marinus* and *P. olseni* -CH 3.1.5.)
- B434 Martesliosis (*Marteilia refringens* and *M. sydneyi* -CH 3.1.3.)
- B436 Mikrocystosis (*Mikrocytos makini* and *M. roughly* -CH 3.1.4.)

NAHRS Program Implementation Procedures

1. **Buy-off by top State animal health officials critical** (i.e. State Veterinarian and Federal Area Veterinarian In-Charge, AVIC). Benefits: 1. Enhance animal health disease surveillance and reporting infrastructure in your State. 2. Disease reporting information coordinated through State Veterinarian's Office. 3. Utilizes well defined disease reporting criteria. 4. Helps meet trade commitments related to having a national surveillance system.
2. **Identify disease information sources.** Identify diagnostic laboratories in your State and other potential data sources: public health agencies/ labs; fish and wildlife agencies/ labs; private practitioners; extension specialists; university and veterinary teaching hospitals; etc. Out-of-State laboratories that process samples from your State should also be contacted. Anyone who is able to provide you with verifiable animal health data should be considered a potential data source.
3. **Educate key stakeholders.** Educate Ag Boards (if applicable), livestock industries, veterinary and producer organizations, laboratories, staff, and other stakeholders in your State to gain support on participating in the NAHRS. Education materials and assistance available through APHIS/CEAH Technical Support or at NAHRS Web site: <http://www.aphis.usda.gov/vs/ceah/cahm>.
4. **Update reportable disease list if required.** Review the existing reportable disease list of your State and modify it as needed to include notification of the OIE List A and B diseases. This may be a lengthy process and should be started as early as possible. Verify your authority to gather and forward the necessary information. States may participate while in process of updating disease list.
5. **Designate OPR.** Identify and designate a person to be responsible for reporting for your State. Inform APHIS/CEAH Technical Support of this individual and update as required. What is reported to the NAHRS is ultimately the responsibility of the Chief State Animal Health Official.
6. **Establish criteria and coordinate collection of data.** Review the NAHRS disease reporting criteria and define expectations for sources. Make sure laboratories and other data sources have a copy of the criteria—NAHRS Uniform Methods and Rules (UM &R).
7. **Collate data.** Establish a mechanism for collating data from the various sources in your State into a useable and transferable format that can be utilized to submit the monthly NAHRS report.
8. **Submit data.** Submit the monthly NAHRS report after verification of data. A blank copy of the State report form is included in the UM&R section of this manual, or an electronic version can be obtained upon request from APHIS/CEAH Technical Support or at the NAHRS Web site: <http://www.aphis.usda.gov/vs/ceah/cahm/index.htm>.
9. **Validate data.** APHIS/CEAH compiles a monthly and annual NAHRS report and sends it to states for validation.

Roles of Participants and Charts of the NAHRS Monthly Data Flow

Roles of participants in NAHRS:

Data Sources: The individual data sources in each State are responsible for providing the chief State animal health official with verifiable data on the NAHRS diseases in a timely manner. The disease reporting criteria should be used as minimum guidelines.

State: The chief State animal health official or his/her designee is responsible for collecting, verifying, and summarizing data from the individual data sources. The summary data are used to complete the NAHRS monthly State report and the report is submitted to APHIS/CEAH according to the time lines provided. The chief State animal health official or his/her designee is responsible for checking the reports from APHIS/CEAH sent out monthly for verification of accuracy and following up on any requests from APHIS staff for further clarification of a disease report. The chief State animal health official is ultimately responsible for the diseases reported for his/her State.

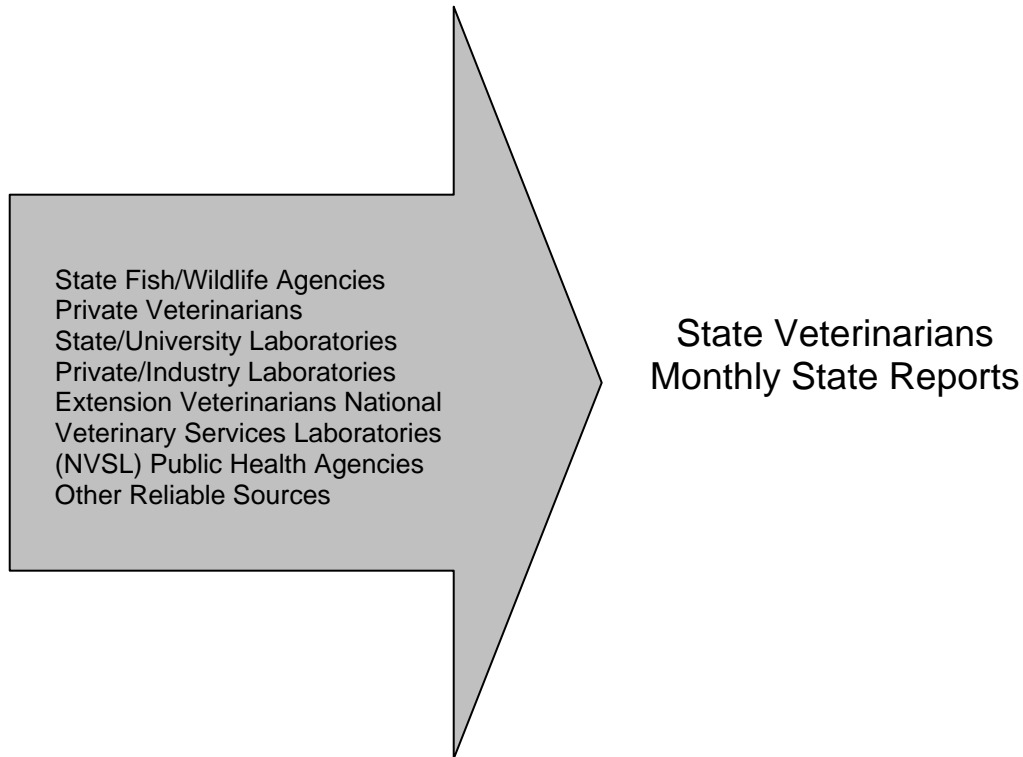
APHIS/CEAH: APHIS/CEAH personnel are responsible for providing blank monthly State report forms (or electronic version), entering the data into a central database and checking for data entry errors, generating reports for States for verification for accuracy and for APHIS review, notifying chief State animal health officials or his/her designees of any reports questioned by APHIS staff, and generating and distributing the National annual summary.

APHIS Staff: APHIS staffs are responsible for reviewing the monthly verification reports for accuracy in a timely manner and notifying CEAH of any questionable reports (positive or negative).

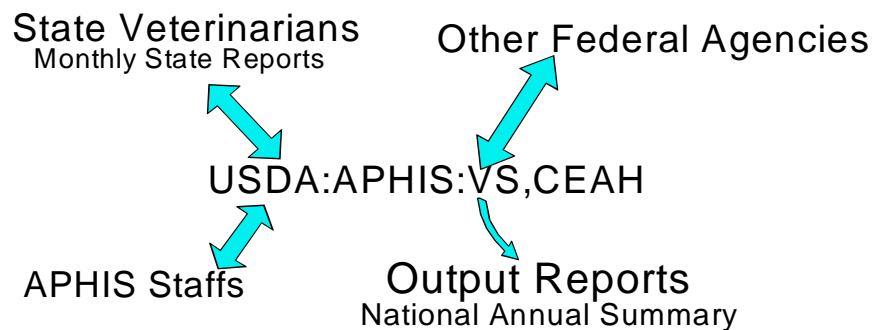
Other federal agencies are not involved in the NAHRS at this time, but are aware of its development.

The flow charts on the next page show the flow of data into the chief State animal health official's (State Veterinarian's) office for completing the monthly State report and the verification process of the data prior to production of the National annual summary.

Input for NAHRS Monthly State Reports



Data Flow for NAHRS Verification and Output Reports



National Animal Health Reporting System (NAHRS)

Uniform Methods and Rules
Effective January 1, 2001

Introduction

The National Animal Health Reporting System (NAHRS) is a cooperative project of the U.S. Animal Health Association (USAHA), the American Association of Veterinary Laboratory Diagnosticians (AAVLD), and the USDA:Animal and Plant Health Inspection Service (APHIS). State and Federal animal health authorities, industries, and the academic, diagnostic, food safety, and practicing components of the veterinary profession contribute reports of clinical disease to the system. The NAHRS is designed to gather monthly information from Chief State Animal Health Officials on the presence of clinical disease in specific commercial livestock, poultry and food fish species in the United States. No identifying information accompanies these reports. The NAHRS is intended to be only one part of a comprehensive and integrated animal health information system and to provide documentation for National and State animal health programs and to expedite Federal endorsement of international animal health certificates.

The annual National animal health reports produced through this system indicate the presence of confirmed clinical disease in the U.S., without reference to specific states or locations. The Centers for Epidemiology and Animal Health prepares the annual summary report for distribution (sample summary follows the monthly report form) to the Chief Animal Health Official of each participating State and to APHIS personnel. This information is used as a source in preparing the USDA's annual report to the OIE on the occurrence of animal diseases in the United States.

This publication - National Animal Health Reporting System (NAHRS): Uniform Methods and Rules (UM&R) - contains minimum standards for the implementation and maintenance of a nationwide system for reporting the occurrence of certain animal diseases.

Part I - Definitions

Commercial Food Fish	Commercial food fish are those finfish maintained in captivity for the production of food. This definition excludes those finfish maintained for ornamental or exhibition purposes.
Commercial Livestock	Commercial livestock are domestic species of cattle, sheep, swine, goats, llamas, alpacas, vicunas or equidae that are maintained in captivity for the production of meat and other animal products, for sport or for exhibition.
Commercial Poultry	Commercial poultry are domesticated fowl, including chickens, turkeys, waterfowl and gamebirds, except doves and pigeons, which are maintained for commercial production of eggs and meat.
OIE List A Diseases	Those diseases designated by the Office International Des Epizooties (OIE) as being: transmissible diseases which have the potential for very serious and rapid spread, irrespective of national borders, which are of serious socio-economic or public health consequence and which are of major importance in the international trade of animals and animal products.
OIE List B Diseases	Those diseases designated by the Office International des Epizooties (OIE) as being: transmissible diseases which are considered to be of socio-economic and/or public health importance in countries and which are significant in the international trade of animals and animal products.
Reporting Criteria	Reporting criteria are those criteria developed by a Commodity Working Group for the OIE List A and List B diseases that affect that commodity. They consist of defined standards for laboratory testing and any additional criteria (e.g. epidemiologic investigation) necessary for the determination that a clinical case of a disease has occurred.
Sources of Credible Information	Sources of credible information on the occurrence of clinical cases of disease in a state include State, Federal, University and Private/Commercial laboratories, State and Federal animal health officials and State/Federal accredited private veterinarians.

Part II - Recommended Procedures

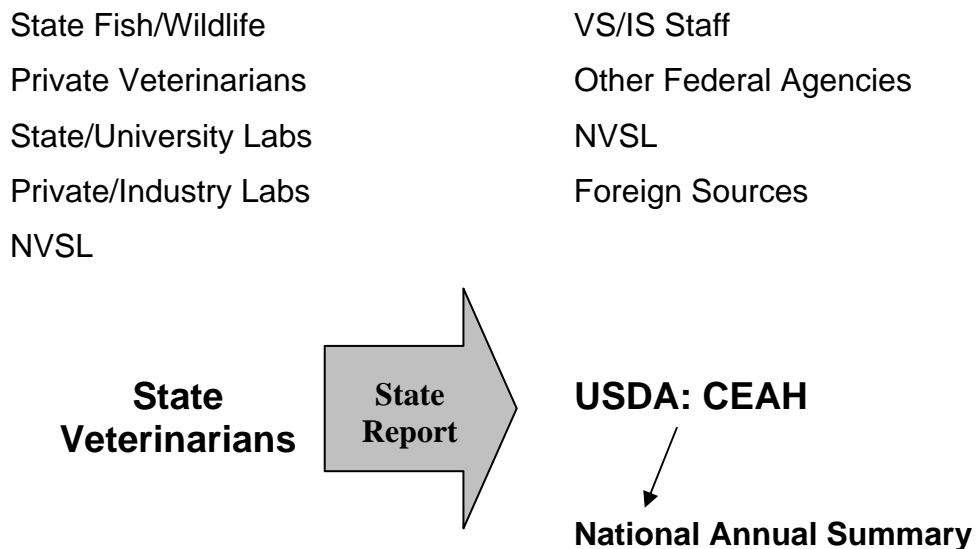
- A. Authority to Require Reporting** State laws and/or regulations shall provide authority to establish monitored or notifiable animal diseases. The list of diseases to be monitored should include the Office International des Epizooties' (OIE) List A and List B diseases. The fact that a disease is monitored or notifiable should not be construed to mean that notification of the occurrence of the disease will result in regulatory action being taken.
- B. Personnel Authorized to Report Diseases** The occurrence of animal diseases in a state shall be reported only by the Chief Animal Health Official from that state.
- C. Scope of Reporting** The NAHRS will only include those species for which reporting criteria have been developed by the Commodity Working Groups of the USAHA/AAVLD National Animal Health Reporting System Steering Committee. Reporting is limited to commercial livestock and poultry and food fish.
- D. Reporting Process** The Chief Animal Health Official in each state will utilize sources of credible information to compile a monthly report on the occurrence of clinical cases of all OIE List A and List B diseases for which reporting criteria have been defined. They will determine if the reporting criteria defined for each disease have been met and, if so, will include the occurrence of that disease in their report. If the information available does not satisfy the definitive reporting criteria, reporting the occurrence of that disease will be at the discretion of the State Chief Animal Health Official. Since it is recognized that testing technology and other considerations may change rapidly, a State Chief Animal Health Official may choose to report the presence of a disease in their state based on presumptive criteria which are different from the definitive criteria but they must report the presence of a disease when the information available meets the definitive criteria for reporting that disease. This report will be submitted to the USDA:APHIS:VS:Center for Epidemiology and Animal Health (CEAH) by the 15th day of each month in the format designated by CEAH.

The CEAH will compile the monthly reports from all participating states and distribute that information to appropriate USDA:APHIS:VS program staff for review. Any discrepancy will be resolved by consultation with the Chief Animal Health Official of the submitting state. Final determination of the occurrence of a clinical case of a disease will be the responsibility of the Chief Animal Health Official of the submitting state.

The CEAH will prepare a consolidated annual report for distribution without reference to individual State or location. The contents of the report will be distributed only to the Chief Animal Health Official of each participating state and select APHIS personnel. This information will be used as only one source in preparing the USDA's annual report to the OIE on the occurrence of animal diseases in the United States.

- E. **Mechanisms for Changing this Document** Changes to the Reporting Criteria will be made by the Commodity Working Groups of the USAHA/AAVLD NAHRS Steering Committee. Suggested changes to this document, other than to the Reporting Criteria, may be submitted to the USDA:APHIS:VS:CEAH for review by the USAHA/AAVLD NAHRS Steering Committee before being considered for approval by the USAHA Animal Health Information Systems Committee.
- F. **Appropriate Use of NAHRS Data** The data collected in the NAHRS are largely qualitative in nature since they are based solely on reporting the presence of a disease in a state or states for any one month. This information does not reflect the number of cases of the disease or the geographic distribution of the disease in the State or States reporting its occurrence. Any questions concerning the appropriate use or interpretation of this data should be directed to the USDA's Center for Epidemiology and Animal Health.

National Animal Health Reporting System



Part III - Reporting Criteria

The following disease reporting criteria are specified for each disease by species.

Reporting criteria for each disease include both the specified standard of laboratory testing and any additional epidemiologic investigation specified. Reporting of all List A diseases and those List B diseases designated as foreign to the United States requires the concurrence of both the Chief State Animal Health Official and the USDA. Reporting of all non-foreign List B diseases requires concurrence of the Chief State Animal Health Official. The primary standard for laboratory testing is the *Office International des Epizooties Manual of Standards for Diagnostic Tests and Vaccines*, referred to as the OIE Manual. For Avian diseases, the *American Association of Avian Pathologists' Laboratory Manual for the Isolation and Identification of Avian Pathogens*, referred to as the AAAP Manual, is also acceptable. For Aquaculture diseases, the *OIE Diagnostic Manual for Aquatic Animal Diseases*, is the standard for laboratory testing. Compatible clinical signs for each disease are also specified in these reference manuals and are included in the following reporting criteria. Appendices A and B follow the criteria.

Abbreviations used in the following criteria include:

CF - complement fixation test
ELISA - enzyme-linked immunosorbent assay
cELISA - competitive inhibition ELISA
SA-ELISA - synthetic antigen ELISA
FA - fluorescent antibody test
HI - hemagglutination inhibition test
IFA - indirect fluorescent antibody test
IHC - immunohistochemistry
PCR - polymerase chain reaction method
SN - serum neutralization or virus neutralization test

OIE List A Disease

A010 Foot and Mouth Disease (FMD)

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.1.1.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A020 Vesicular Stomatitis (VS)

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.1.2.

This disease is treated as a foreign animal disease for the U.S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A030 Swine Vesicular Disease

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.3.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A040 Rinderpest

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.4.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A050 Peste des Petits Ruminants

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.5.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A060 Contagious Bovine Pleuropneumonia (*Mycoplasma mycoides mycoides*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.6.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A070 Lumpy Skin Disease

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.7.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A080 Rift Valley Fever

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.8.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A090 Bluetongue

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.9.

Presumptive diagnosis is based on compatible clinical signs plus positive serology (cELISA or SN). Definitive diagnosis requires virus isolation and characterization.

A100 Sheep Pox and Goat Pox

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.10.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A110 African Horse Sickness

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.11.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A120 African Swine Fever

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.12.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A130 Classical Swine Fever (Hog Cholera)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.13.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A150 Highly Pathogenic Avian Influenza (Fowl Plague)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.1.14.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

A160 Exotic Newcastle Disease

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.1.15.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

OIE List B Diseases**MULTIPLE SPECIES****B051 Anthrax (*Bacillus anthracis*)**

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.2.1.

Presumptive diagnosis is based on compatible clinical signs and demonstration of typical *Bacillus anthracis* organisms on direct microscopic examination of blood smears. Definitive diagnosis requires isolation and identification of the organism by USDA's National Veterinary Services Laboratory and concurrence of the State Chief Animal Health Official and the Federal Area Veterinarian-in-Charge.

B052 Aujeszky's Disease (*Pseudorabies*)

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.2.2, or Code of Federal Regulations, Section 9, Part 85.1.

Definitive diagnosis is based on the results of USDA-approved serologic tests or virus isolation and identification and concurrence of the State Chief Animal Health Official and Federal Area Veterinarian-in-Charge.

B053 Echinococcosis/Hydatidosis

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.2.3.

Definitive diagnosis is based on observation and identification of the *Echinococcus granulosus*, *E. multilocularis*, *E. oligarthrus*, or *E. vogeli* organism in organs or feces.

B055 Heartwater (*Cowdria ruminantium*)

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.2.7.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B056 Leptospirosis

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.2.4.
Presumptive diagnosis may be based on a fourfold or greater increase of titer in paired serum samples using the Microscopic Agglutination Test in non-vaccinated animals. Definitive diagnosis requires demonstration and identification of the organism (culture, PCR, IHC, FA, silver stain).

B057 Q-Fever (*Coxiella burnetti*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. X.3.
Presumptive diagnosis is based on compatible clinical signs plus histopathology and/or positive serology (CF, IFA or ELISA). Definitive diagnosis requires isolation and identification of *Coxiella burnetti* (culture, PCR, IHC).

B058 Rabies

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.2.5.
Diagnosis may be based on either a specific FA test (with or without mouse inoculation) or typical histopathologic lesions (Negri bodies).

B059 Paratuberculosis (Johne's Disease, *Mycobacterium paratuberculosis*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.2.6.
Presumptive diagnosis is based on compatible clinical signs plus compatible histopathology and/or serology (AGID) or demonstration of acid-fast organisms in lesions. Definitive diagnosis requires demonstration of *Mycobacterium paratuberculosis* by culture or PCR/DNA probe.

B060-B061 New and Old World Screwworm (*Cochliomya (Callitroga) hominivorax Chrysomya bezziana*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.2.8.
This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B062 Trichinellosis (*Trichinella spiralis*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.2.9.
Presumptive diagnosis may be based on serologic testing (ELISA). Definitive diagnosis requires direct visualization of *Trichinella spiralis* using either the trichinoscope method or the digestion method.

BOVINE

B101 Bovine Anaplasmosis (*Anaplasma marginale*, *A. centrale*)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.7.
Reporting Criteria: Diagnosis can be based on either serology (complement fixation, card agglutination, IFA, ELISA or rMSP5-cELISA) or identification of the causative organism on Giemsa or Wright's-Giemsa stained blood smear or PCR or nested PCR.

B102 Bovine Babesiosis (*Babesia bovis*, *B. bigemina*)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.8.
Reporting Criteria: This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B103 Bovine Brucellosis (*Brucella abortus*)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.1.
Reporting Criteria: Presumptive diagnosis is based on serology. Definitive diagnosis requires isolation and identification of *Brucella abortus*. Determination of a case is made following consultation among the USDA Brucellosis Staff, the State Chief Animal Health Official and the USDA: APHIS: VS Area Veterinarian-in-Charge.

B104 Bovine Genital Campylobacteriosis (*Campylobacter fetus venerealis*)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.2.
Reporting Criteria: Definitive diagnosis requires isolation and identification of *Campylobacter fetus* ssp *venerealis*.

B105 Bovine Tuberculosis (*Mycobacterium bovis*)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.3.
Reporting Criteria: Isolation and identification of *Mycobacterium bovis* is required for a definitive diagnosis. Determination of a case is made following consultation among the USDA Tuberculosis Staff, the State Chief Animal Health Official and the USDA: APHIS: VS Area Veterinarian-in-Charge.

B106 Bovine Cysticercosis (*Cysticercus bovis*)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.9.
Reporting Criteria: Demonstration of the *Taenia saginata* metacestode stages (*Cysticercus bovis*) in striated muscle.

B107 Dermatophilosis (*Dermatophilus congolensis*)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.10.
Reporting Criteria: Diagnosis may be made by the culture and identification of *Dermatophilus congolensis*, microscopic observation of typical organisms in scabs or exudate, or the use of specific antisera for FA testing.

B108 Enzootic Bovine Leukosis (BLV)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.4.
Reporting Criteria: Presumptive diagnosis can be based on serology (AGID or ELISA), or macroscopic and microscopic lesions. Definitive diagnosis requires demonstration of the agent (virus isolation, PCR, IHC) and/or typical histologic lesions.

B109 Hemorrhagic Septicemia (*Pasteurella multocida*, serotypes B/Asian or E/African)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.12.
Reporting Criteria: Definitive diagnosis requires isolation and identification of *Pasteurella multocida* and serotyping as either B/Asian or E/African serotypes.

B110 Infectious Bovine Rhinotracheitis/Infectious Pustular Vulvovaginitis (IBR/IPV)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.5.
Reporting Criteria: Presumptive diagnosis can be based on serology (ELISA or virus neutralization) in unvaccinated animals or compatible macroscopic and microscopic lesions. Definitive diagnosis requires detection of the virus (BHV-1) by virus isolation, IFA, immunohistochemistry, *in situ* hybridization or PCR.

B111 Theileriosis (*Theileria annulata*, *T. parva*)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.11.
Reporting Criteria: This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B112 Trichomonosis (*Tritrichomonas* (*Trichomonas*) *foetus*)

Standard for Laboratory Testing: OIE Manual, Ch. 2.3.6.
Reporting Criteria: Definitive diagnosis made be made by identification of *Tritrichomonas* (*Trichomonas*) *foetus* by either direct microscopic exam, *in vitro* cultivation or PCR testing.

B113 Trypanosomosis (Tse-tse bone, *Trypanosoma congolense*, *T. vivax*, *T. brucei brucei*)

Standard for Laboratory Testing:

OIE Manual, Ch. X.6.

Reporting Criteria:

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B114 Bovine Malignant Catarrh (Malignant Catarrhal Fever, Wildebeest associated)

Standard for Laboratory Testing:

OIE Manual, Ch. X.2, or *J. Clin. Microbiol.*, 32:1674-1679, 1994, or *J. Clin. Microbiol.*, 33:2048-2053, 1995.

Reporting Criteria:

Presumptive diagnosis can be made based on serology (c-ELISA, SN or IFA) compatible clinical signs and/or characteristic histological lesions. Definitive diagnosis requires demonstration of the agent (virus isolation or PCR testing).

B115 Bovine Spongiform Encephalopathy

Standard for Laboratory Testing:

OIE Manual, Ch. 2.3.13 or *J. Vet. Diagn. Invest.* 5:309-316, 1993, or *J. Vet. Diagn. Invest.* 4: 447-449, 1992.

Reporting Criteria:

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

CAPRINE/OVINE

B151 Ovine Epididymitis (*Brucella ovis* infection)

Standard for Laboratory Testing:

OIE Manual, Ch. 2.4.1.

Reporting Criteria:

Isolation and identification of *Brucella ovis*. Determination of a case is made following consultation among the USDA Brucellosis Staff, the State Chief Animal Health Official and the USDA:APHIS:VS Area Veterinarian-in-Charge.

B152 Caprine and Ovine Brucellosis (excluding *B. ovis*)

Standard for Laboratory Testing:

OIE Manual, Ch. 2.4.2.

Reporting Criteria:

Presumptive diagnosis may be based on serology. Definitive diagnosis requires isolation and identification of the *Brucella* organism. Determination of a case is made following consultation among the USDA Brucellosis Staff, the State Chief Animal Health Official and the USDA:APHIS:VS Area Veterinarian-in-Charge.

B153 Caprine Arthritis/Encephalitis

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.4.4/5.
Compatible clinical signs plus positive serology (AGID or ELISA) or compatible clinical signs and histopathology at necropsy.

B154 Contagious Agalactia (*Mycoplasma agalactiae*, *M. capricolum*, *M. putrefaciens*, *M. mycoides mycoides*, *M. mycoides mycoides* LC)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.4.3.
Diagnosis is based on isolation and identification of any one of the causative organisms: *Mycoplasma agalactiae*, *M. capricolum*, *M. putrefaciens*, *M. mycoides* ssp. *mycoides* and *M. mycoides* ssp. *mycoides* LC. Any outbreak resembling the classical Mediterranean condition should be treated as a foreign animal disease. In such a case a USDA-certified Foreign Animal Disease Diagnostician should be assigned to investigate according to the standardized protocol (Appendix B) and should submit diagnostic materials to the USDA's National Veterinary Services Laboratory.

B155 Contagious Caprine Pleuropneumonia (*Mycoplasma capricolum capripneumoniae*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.4.6.
This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B156 Enzootic Abortion of Ewes (Ovine psittacosis, *Chlamydia psittaci*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.4.7.
Compatible clinical history plus compatible histopathology or positive FA test or positive ELISA or isolation and identification of *Chlamydia psittaci*.

B157 Ovine Pulmonary Adenomatosis

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, X.7.
Compatible clinical signs plus gross pathology and histopathology.

B158 Nairobi Sheep Disease

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. X.8.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B159 Salmonellosis (*Salmonella abortusovis*)

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch.X.4.

Diagnosis requires isolation and identification of the causative agent, *Salmonella abortus ovis*.

B160 Scrapie

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. X.9.

Diagnosis is based on clinical signs plus compatible histopathology or immunohistochemistry and concurrence of the State Chief Animal Health Official and the USDA's Area Veterinarian-in-Charge.

B161 Maedi-Visna/Ovine Progressive Pneumonia

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.4.4/5.

Diagnosis is based on compatible clinical signs plus positive AGID serology or compatible clinical signs and histopathology at necropsy.

EQUINE**B201 Contagious Equine Metritis (*Taylorella equigenitalis*)**

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.5.1.

Definitive diagnosis requires isolation and identification of *Taylorella equigenitalis* and the concurrence of the State Chief Animal Health Official and the Federal Area Veterinarian-in-Charge.

B202 Dourine (*Trypanosoma equiperdum*)

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.5.2.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B203 Epizootic Lymphangitis (*Histoplasma farciminosum*)

Standard for Laboratory Testing:

OIE Manual, Ch. 2.5.13.

Reporting Criteria:

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B204 Equine Encephalomyelitis (Eastern {EEE} or Western {WEE})

Standard for Laboratory Testing:

OIE Manual, Ch. 2.5.3.

Reporting Criteria:

Presumptive diagnosis may be made based on compatible clinical signs and serology (HI titre of 1:40 or greater, SN titre of 1:10 or greater). Definitive diagnosis requires virus isolation and identification.

B205 Equine Infectious Anemia (EIA)

Standard for Laboratory Testing:

OIE Manual, Ch. 2.5.4.

Reporting Criteria:

Presumptive diagnosis may be based on compatible clinical signs plus serology using a USDA-approved test (SA-ELISA, c-ELISA or AGID). Definitive diagnosis requires confirmation testing with a USDA-approved AGID test, an epidemiologic investigation by a State or Federal Veterinarian and the concurrence of the State Chief Animal Health Official and the Federal Area Veterinarian-in-Charge.

B206 Equine Influenza (Virus Type A)

Standard for Laboratory Testing:

OIE Manual, Ch. 2.5.5.

Reporting Criteria:

Presumptive diagnosis is based on compatible clinical testing (AGID, ELISA). Definitive diagnosis is based on compatible histologic lesions and demonstration of the agent (virus isolation, FA, IHC).

B207 Equine Piroplasmosis (Babesiosis, *Babesia* (*Piroplasma*) *equi*, *B. caballi*)

Standard for Laboratory Testing:

OIE Manual, Ch. 2.5.6.

Reporting Criteria:

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official. Diagnosis requires serologic confirmation (CF) at the USDA's National Veterinary Services Laboratory, an epidemiologic investigation and concurrence of the State Chief Animal Health Official and the Federal Area Veterinarian-in-Charge.

B208 Equine Rhinopneumonitis (EHV-1 and EHV-4)

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.5.7.

Presumptive diagnosis based on compatible clinical signs, histologic lesions (inclusion bodies) and/or a positive FA.

Definitive diagnosis requires either virus isolation and identification or a 4X rise in titre in paired serum samples on the SN test.

B209 Glanders (*Pseudomonas mallei*)

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.5.8.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B210 Horse Pox

Standard for Laboratory Testing:

Reporting Criteria:

USDA's National Veterinary Services Laboratory.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B211 Equine Viral Arteritis (EVA)

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.5.10.

Definitive diagnosis requires isolation and identification of the virus. Equids that are epidemiologically linked to a positive animal may be considered positive if they exhibit a SN titre of 1:4 or greater.

B212 Japanese Encephalitis

Standard for Laboratory Testing:

Reporting Criteria:

OIE Manual, Ch. 2.5.14.

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B213 Horse Mange

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. X.14.
Definitive diagnosis requires identification of the *Sarcoptes* mite from specimens.

B215 Surra (*Trypanosoma evansi*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. X.11.
This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B216 Venezuelan Equine Encephalomyelitis (VEE)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.5.12.
This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

PORCINE**B251 Atrophic Rhinitis of Swine (*Bordetella bronchiseptica*, *Pasteurella multocida*)**

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.6.1.
Definitive diagnosis is based on clinical signs, gross lesions, and isolation of *Pasteurella multocida* and/or *Bordetella bronchiseptica*.

B252 Porcine Cysticercosis (*Cysticercus cellulosae*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.3.9.
Demonstration of the *Taenia solium* metacestodes (*Cysticercus cellulosae*) in striated muscle.

B253 Porcine Brucellosis (*Brucella suis*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.6.2.
Presumptive diagnosis is based on serological testing. Definitive diagnosis requires the isolation and identification of *Brucella suis*. Determination of a case is made following consultation among the USDA Brucellosis Staff, the State Animal Health Official and the USDA: APHIS: VS Area Veterinarian-in-Charge.

B254 Transmissible Gastroenteritis (TGE)

Standard for Laboratory Testing:

OIE Manual, Ch. 2.6.4.

Reporting Criteria:

Diagnosis is based on clinical signs and typical histopathological lesions and/or antigen detection using either FA testing or IHC.

B256 Enterovirus Encephalomyelitis

Standard for Laboratory Testing:

OIE Manual, Ch. 2.6.3.

Reporting Criteria:

This disease is a foreign animal disease for the U. S. A. The State/Federal Accredited Veterinarian is required to report all animal disease conditions whose differential diagnosis could include a foreign animal disease (Appendix A). A USDA-certified Foreign Animal Disease Diagnostician is assigned to investigate according to the standardized protocol (Appendix B) and submits diagnostic materials to the USDA's National Veterinary Services Laboratory. Reporting requires the concurrence of the USDA and the State Chief Animal Health Official.

B257 Porcine Reproductive and Respiratory Syndrome (PRRS)

Standard for Laboratory Testing:

OIE Manual, Ch. X.12.

Reporting Criteria:

Presumptive diagnosis is based on seroconversion (USDA-approved ELISA, IFA or SN tests) in non-vaccinated animals. Definitive diagnosis requires typical histological lesions and virus isolation characterization in herds using modified-live vaccines.

AVIAN (COMMERCIAL POULTRY)**B301 Avian Infectious Bronchitis**

Standard for Laboratory Testing:

OIE Manual, Ch. 2.7.6. or AAAP Manual, Ch. 29.

Reporting Criteria:

Presumptive diagnosis of clinical disease caused by wild-type viruses can be made on the basis of compatible clinical signs or lesions plus serology but a definitive diagnosis requires isolation of a non-vaccine strain of the virus by molecular methods.

B302 Avian Infectious Laryngotracheitis (ILT)

Standard for Laboratory Testing:

OIE Manual, Ch. 2.7.7. or AAAP Manual, Ch. 19.

Reporting Criteria:

Clinical disease or lesions compatible with wild-type ILT virus confirmed by either histologic demonstration of intranuclear inclusion bodies or electron microscopic demonstration of typical viral particles and isolation of non-vaccine related virus.

B303 Avian Tuberculosis (*Mycobacterium avium*)

Standard for Laboratory Testing:

OIE Manual, Ch. 2.7.8. or AAAP Manual, Ch. 13.

Reporting Criteria:

Presumptive diagnosis is based on compatible clinical signs or lesions and demonstration of acid-fast bacilli in smears or sections from affected tissues. Definitive diagnosis requires isolation and identification of the organism by culture.

B304 Duck Virus Hepatitis (DVH)

Standard for Laboratory Testing:

OIE Manual, Ch. 2.7.9. or AAAP Manual, Ch. 34.

Reporting Criteria:

Diagnosis can be made on the basis of characteristic gross and microscopic lesion and demonstration of the agent.

B305 Duck Virus Enteritis (DVE)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.7.10. or AAAP Manual, Ch. 21.
Presumptive diagnosis can be made on the basis of compatible clinical signs plus gross and histopathologic lesions, with the demonstration of intranuclear inclusion bodies. Definitive diagnosis requires isolation and identification of the DVE virus.

B306 Fowl Cholera (Avian Pasteurellosis, *Pasteurella multocida*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.7.11. or AAAP Manual, Ch. 3.
Presumptive diagnosis can be made on the basis of compatible clinical signs, gross lesions and the microscopic demonstration of bipolar staining bacteria in smears from affected tissues. Definitive diagnosis is made on the basis of compatible clinical signs or lesions and the isolation and identification of wild *Pasteurella multocida*.

B307 Fowl Pox

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. X.13. or AAAP Manual, Ch. 23.
Presumptive diagnosis of wild-type fowl pox can be made by compatible clinical signs or lesions plus demonstration of cytoplasmic inclusion bodies with the morphology of pox virus. Definitive diagnosis requires isolation of the non-vaccine related poxvirus.

B308 Fowl Typhoid (*Salmonella gallinarum*)

Standard for Laboratory Testing:

OIE Manual, Ch. 2.7.5. or AAAP Manual, Ch. 1, or National Poultry Improvement Plan, USDA:APHIS 91-55-031, April, 1996.

Reporting Criteria:

Flocks are monitored by serology (agglutination test). Definitive diagnosis requires compatible clinical signs, isolation, and identification of *Salmonella gallinarum*.

B309 Infectious Bursal Disease (Gumboro Disease)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.7.1. or AAAP Manual, Ch. 39.
Diagnosis of clinical disease is based on characteristic clinical signs and lesions. Definitive diagnosis requires non-vaccine related virus isolation and serotyping using virus neutralization along with cross protection tests.

B310 Marek's Disease

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.7.2. or AAAP Manual, Ch. 20.
Diagnosis of clinical disease can be based on characteristic clinical history, signs and gross pathology and histopathology.

B311 Avian Mycoplasmosis (*Mycoplasma gallisepticum*)

Standard for Laboratory Testing:
Reporting Criteria:

OIE Manual, Ch. 2.7.3. or AAAP Manual, Ch. 14.
Flocks are monitored using serology (plate agglutination or ELISA confirmed by HI). Isolation and identification of *Mycoplasma gallisepticum* is definitive.

B312 Avian Chlamydiosis (Ornithosis and Psittacosis, *Chlamydia psittaci*)

Standard for Laboratory Testing: OIE Manual, Ch. 2.7.4. or AAAP Manual, Ch. 15.
Reporting Criteria: Presumptive diagnosis may be made based on compatible clinical signs plus serology (CF, ELISA), immunofluorescence, or immunohistochemical examination of swabs or tissues. Isolation and identification of *Chlamydia psittaci* is required for definitive diagnosis.

B313 Pullorum Disease (*Salmonella pullorum*)

Standard for Laboratory Testing: OIE Manual, Ch. 2.7.5. or AAAP Manual, Ch. 1, or National Poultry Improvement Plan, USDA:APHIS 91-55-031, April, 1996.
Reporting Criteria: Flocks are monitored by serology (agglutination test). Definitive diagnosis requires compatible clinical signs, isolation, and identification of *Salmonella pullorum*.

AQUACULTURE (COMMERCIAL FOOD FISH)

B401 Viral Hemorrhagic Septicemia

Standard for Laboratory Testing: OIE Diagnostic Manual for Aquatic Animal Diseases, Ch. 2.1.5.
Reporting Criteria: Definitive diagnosis is based on virus isolation with confirmation by SN or immunological methods and the concurrence of State Chief Animal Health Official and the Federal Area Veterinarian-in-Charge.

B404 Spring Viremia of Carp

Standard for Laboratory Testing: OIE Diagnostic Manual for Aquatic Animal Diseases, Ch. 2.1.4.
Reporting Criteria: Definitive diagnosis is based on virus isolation with confirmation by SN or immunological methods and the concurrence of State Chief Animal Health Official and the Federal Area Veterinarian-in-Charge.

B405 Infectious Hematopoietic Necrosis

Standard for Laboratory Testing: OIE Diagnostic Manual for Aquatic Animal Diseases, Ch. 2.1.2.
Reporting Criteria: Definitive diagnosis is based on virus isolation with confirmation by SN or immunological methods and the concurrence of State Chief Animal Health Official and the Federal Area Veterinarian-in-Charge.

B413 Epizootic Hematopoietic Necrosis

Standard for Laboratory Testing: OIE Diagnostic Manual for Aquatic Animal Diseases, Ch. 2.1.1.
Reporting Criteria: Definitive diagnosis is based on virus isolation with confirmation by SN or immunological methods and the concurrence of State Chief Animal Health Official and the Federal Area Veterinarian-in-Charge.

B415 *Oncorhynchus masou* Virus Disease

Standard for Laboratory Testing: OIE Diagnostic Manual for Aquatic Animal Diseases, Ch. 2.1.3.
Reporting Criteria: SN or immunological methods and the concurrence of State Chief Animal Health Official and the Federal Area Veterinarian-in-Charge base definitive diagnosis on virus isolation with confirmation.

APPENDIX A

June 21, 1996

Veterinary Services Notice 96-13

Subject: Operating Procedures for Vesicular Stomatitis Virus (VSV)

To: Directors, VS Regions
Area Veterinarians in Charge, VS

The first responsibility of Veterinary Services (VS), in the face of any vesicular disease condition in the animal population of the United States is to determine whether or not the condition is a foreign animal disease such as foot-and-mouth disease. Once a vesicular disease condition has been determined, to be VSV, the primary responsibility becomes that of the affected States, with VS providing assistance whenever possible.

The purpose of this document is to provide an overview of VS' response once a vesicular disease condition has been determined to be VSV.

1. For clarity in both international reporting and proper disease response, VS will use the following definition for VSV: vesicular stomatitis virus in the Americas is a sporadic, re-emerging disease.
2. VS is committed to work hand in hand with State officials to meet their stated goals and regional U.S. Animal Health Association resolutions (March 1996) of: immediate investigation and diagnosis of every vesicular disease, close cooperation with veterinary practitioners and industry representatives, prevention of VSV extension to new areas, effective and timely response and communication, and the mitigation of adverse affects of vesicular stomatitis on individual animal owners and the local economy while maintaining free and open trade to the greatest extent possible. VS' goals further intend to minimize losses to animal production, minimize impacts on local agriculture, protect global trade markets for the rest of the Nation, and maximize the exchange and dissemination of information.
3. VS will contribute the necessary assistance in order to meet the above goals. These will be dependent on the geographic level of the outbreak. If a VSV outbreak is in a single State, the Area Veterinarian in Charge (AVIC) will support field operations using area resources. Emergency Programs (EP) will coordinate and support the response. If a VSV outbreak is in more than one State within a region, the Regional Director will support field operations using regional resources. The Regional Director may activate the Regional Emergency Animal Disease Eradication Organization (READEO). If a VSV outbreak spans more than one region, the Regional Directors will support field operations using regional resources. The Regional Directors may activate READEO's. EP will coordinate and support the response.

APPENDIX A

Veterinary Services Notice 96-13

4. In order that there be no confusion in terminology and reduce unfounded rumors, the following working definitions should be adhered to:

Investigation: Care should be taken to refer to any suspect situation as an "investigation" and not a "case." Confusion may be avoided if all initial or preliminary investigations are referred to as investigations until laboratory confirmation.

Case: This term should be carefully restricted to any single animal that has been confirmed positive by compatible clinical symptoms and laboratory results to be infected with VSV. Vesicular conditions, in other than equine, will be considered a foreign animal disease investigation with laboratory samples being sent to the Foreign Animal Disease Diagnostic Laboratory at Plum Island, New York.

Case-Positive Premises: Because a single positive animal will determine the status premises, a premises with one or more cases should be referred to as a "case-positive premises." All equine on a premises need not be tested in an outbreak situation.

Compatible Clinical Signs: These are clinical signs that are consistent with VSV infection and for which there is no other likely cause as determined by history and epidemiology.

5. The determination of the index case for the Nation will be made following consultation with the Foreign Animal Disease Diagnostician, the State Veterinarian, and the AVIC in that State. The index case for the Nation will be based on compatible clinical signs (~as defined above) and appropriate laboratory information which may include virus isolation or a four-fold increase in complement fixation (CF) or serum neutralization (SN) titer, in paired sera collected at least 7 days apart.

The index case for an additional State will be based on the following: If there is no epidemiologic connection to a case-positive State, the index case definition will apply. If there is an epidemiologic connection to a case-positive State, the subsequent case definition will apply.

From a case-positive State, subsequent cases will be based on any of the following: clinical signs and virus isolation, clinical signs and a positive antigen capture-enzyme linked immunosorbent. Assay (c-ELISA) test result, clinical signs and a positive CF antibody test result, or clinical signs and a four-fold increase in CF or SN titer, in paired sera collected at least 7 days apart.

6. Each State will determine use or non-use of vaccine. To assist State officials in determination of use or non-use of vaccine, VS will provide input on possible trade implications and will reference other vaccine policies from other countries.

7. For overall management plan recommendations, including animal movement and vector control, refer to the VS document entitled "Vesicular Stomatitis Strategy." Planned publication date is June 1996. This document should detail the methods outlined by recent regional USAHA resolutions and reflect the similar strategies proposed by Canada and Australia.

/s/ R'. L. Rissler for
Donald W. Luchsinger
Deputy Administrator
Veterinary Services

APPENDIX B

VETERINARY SERVICES MEMORANDUM NO. 580.4

Subject: Procedures for Investigating a Suspected Foreign Animal Disease (FAD)

To: Directors. VS
Area Veterinarians in Charge
Chief Staff Veterinarians. VS

I. PURPOSE

This memorandum revises Veterinary Services (VS) policy/procedures for FAD investigations.

II. CANCELLATION

VS Memorandum No. 580.4, dated May 12...1994, is hereby canceled.

III. GENERAL

The Area Veterinarian in Charge (AVIC) will conduct, or have his or her representative conduct, a timely investigation of all reported animal diseases. Whenever there is any suspicion that the disease may be an FAD, the AVIC will immediately assign the nearest Foreign Animal Disease Diagnostician (FADD) to do a complete investigation.

IV. EMERGENCY PROGRAMS' (EP) PHONE NUMBERS

During regular business hours Monday-Friday (8:00 a.m. to 4:30 p.m. eastern time), call EP's main number, 301-734'8073, to report FAD investigations. If unable to contact EP at the above number, or when calling after regular business hours, please refer to the numbers provided in Appendix I.

V. INVESTIGATION PROCEDURES

A. AVIC Responsibilities

The AVIC, or designated representative, is responsible for immediately assigning an FADD to conduct an investigation. If the AVIC is having difficulty assigning an FADD, the AVIC should contact a nearby State or the Regional Director (RD) for assistance in acquiring the services of an FADD.

It is the responsibility, of the AVIC to immediately notify EP and the RD that an FAD investigation is occurring, insure that an investigation is initiated within 24 hours of initial notification, insure that EP Staff receives the initial VS 12-27 Field Investigation Form within 24 hours of the initial investigation, and inform the State Veterinarian of all FAD investigations.

APPENDIX B

VETERINARY SERVICES MEMORANDUM NO. 580.4

To prepare the FADD for the investigation, the AVIC should furnish the following information to the FADD (this same information should be provided to EP and the RD):

- The Investigation Control Number. (See Appendix II.)
- Suspected disease condition.
- Date and time of initial report.
- Species, breed, or type, and number of animals on premises.
- Number of animals affected.
- History on the disease outbreak.
- Name and telephone number of owner and/or manager.
- Premises address.
- Name and telephone number of person and/or private practitioner reporting the: disease.

B. FADD Responsibilities

- Contact owner/manager to set up an appointment for an investigation.
- Make an assessment of the immediate animal disease situation.
- Formulate a differential disease diagnosis for the illness.
- Collect laboratory specimens to confirm a diagnosis.
- Recommend and execute disease control actions if necessary.
- Contact EP to provide airway bill tracking number, obtain a priority number and assigned laboratory for sample submissions. (See Appendix III.)
- Ship diagnostic specimens in good condition to the assigned laboratory (either the Foreign Animal Disease Diagnostic Laboratory (FADDL), Plum Island, New York, or the National Veterinary Services Laboratories (NVSL) in Ames, Iowa. (See Appendix III.)
- Notify the necessary State or Tribal officials to initiate quarantine if appropriate.

VI. REPORTING PROCEDURES

A. General

To present accurate data regarding FAD surveillance activities within the United States, a timely report is necessary whether or not diagnostic specimens are collected and submitted. These reports, in pan, reflect disease surveillance within the United States. Overall surveillance is of interest to industry, trading partners, the public, and others.

B. Notification Procedures

- All impending FAD investigations will be reported to EP and the RD immediately upon the AVIC's initial notification.
- The FADD should submit a 12-27 report to the AVIC for all FAD investigations **within 24 hours**.
- The AVIC should ensure that a 12-27 report is submitted to EP **within 24 hours** of completion of the initial investigation.
- The AVIC is responsible for assuring that the FADD has completed the 12-27 reports and that EP and the RD have received them.
- As additional information is obtained, it should be added to the current 12-27 report and sent to the AVIC, EP, and the KD.

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C. Laboratory. Reporting

NVSL and/or FADDL will report final laboratory results to EP staff and the AVIC. The AVIC is responsible for providing copies of the report to the State Veterinarian and the RD. The FADD is to inform the private practitioner and owner of the laboratory results.

VII. CASE DIAGNOSIS

Positive diagnosis of a case is made by EP staff in consultation with the FADD, AVIC, State Veterinarian and Regional Director and is based on laboratory results and/or the epidemiological analysis of the disease situation.

VIII. CASE CLOSURE

Investigations for suspected FAD's in livestock and poultry will be closed out by EP staff after consultation with NVSL/FADDL, the FADD, the AVIC, and the State Veterinarian. A 12-27 report will be used to record all FAD investigation data, follow-up information, quarantine release dates, and case closures. Since data is generally collected at different times, the 12-27 is to be updated as information becomes available.

Joan M. Amoldi
Deputy Administrator
Veterinary Services

3 Enclosures

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APPENDIX I

EMERGENCY PROGRAMS' PHONE NUMBERS

BUSINESS HOURS:

MAIN OFFICE NUMIBER 301-734-8073

DR. TERRY WILSON	301-734--4917 (OFFICE); 1-888-617-1869'(PAGER)
DR. JOE ANNELLI	301-734-5909 (OFF'ICE); 1-888:582-7349 (PAGER)
DR. ROBERTA DUHAIME	301-734-8069 (OFFICE); 1-888-897-5924 (PAGER)
DR. DAVE WILSON	301-734-7831 (OFFICE); 1-888-617-1864 (PAGER)
DR. KAREN JAMES	301-734-8240 (OFFICE); 1-888-368-4190 (PAGER)

AFTER BUSINESS HOURS, HOLIDAYS, OR WEEKENDS:

DR. TERRY WILSON	410-992-4673 (HOME); 1-888-617-1869 (PAGER)
DR. JOE ANNELLI	410-750-9743 (HOME); 1-888-582-7349 (PAGER)
DR. LARRY WHITE	970-416-0526 (HOME); 1-888-587-9392 (PAGER)

Note: If after a reasonable amount of time you do not receive a reply to a page, please page another person as technical barriers to successful nationwide paging may occur. Some U.S. locations are not covered by "nationwide" service. Airborne travel or subway travel could prevent a page from being received.

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APPENDIX II

12-27 FOREIGN ANIMAL DISEASE (FAD) INVESTIGATION REPORTING FORM INSTRUCTIONS

INTRODUCTION

A completed 12-27 report should be sent to EP **24 hours** after the initial visit and updated as significant events occur or when the investigation is closed out.

INVESTIGATION CONTROL NUMBER

The FIELD INVESTIGATION CONTROL NUMBER AND DOS FILE NAME on the 12-27 should be the same. The AVIC is to assign the 8-digit Field Investigation CONTROL NUMBER for each investigation. CONTROL NUMBERS are to be assigned as follows:

- First 2 digits represent the fiscal year, (e.g., 97)
- Next 2 digits represent the State (e.g., California = CA)
- Next 3 digits specifies the next investigation number for the fiscal year (e.g., 005)
- Next digit specifies the region (e.g., Western Region = W)
- Next place a decimal point after the 8 digits.
- Next add the three digits that represent the date that investigation was done (i.e., April 9 = 409) (NOTE: Use "a" for October, "b" for November and "c" for December.)

In this example "97CA005W.409" would represent the fifth investigation conducted in the Western Region. State of California, for fiscal year 1997. This investigation was done on April 9, 1997.

EMERGENCY PROGRAMS NOTIFICATION

The 12-27 report (WordPerfect or FEDS) should be sent to EP by FTS-2000 to address IA349VSEPINV; by GroupWise to address FAD; through the FEDS by Interact to address LJohnson@APHIS.USDA.GOV; or by FAX to EP 301-734-7817. If there is a transmission problem, call. EP at 301-734-8073.

Alt updated 12-27 report forms should always have the same Control Number and be sent to EP.

APPENDIX B

VETERINARY SERVICES MEMORANDUM NO. 580.4

Appendix III

FAD DIAGNOSTIC SPECIMEN SUBMISSION PROCEDURES

When the FADD has completed the initial investigation, he should contact EP to obtain a priority, number and laboratory assignment. In conjunction with the AVIC or FADD, EP will classify laboratory specimens in order of importance, as Priority 1, 2, or 3. Laboratory priority is determined based on the disease condition, differential diagnosis, species affected, morbidity, mortality, and epidemiologic findings. Mark the priority number on the label affixed outside the shipping container and the VS 10-4 submission form.

Priority 1: Specimens will be unpacked, examined, and diagnostic studies begun immediately at NVSL\FADDL, including Saturdays, Sundays, and holidays. Counter-to-counter air must be used for Sunday, holiday, and certain Saturday: Priority 1 shipments. Overtime is used if necessary. Results are reported by telephone to EP immediately upon completion of initial laboratory results.

Priority 2: Specimens are unpacked, examined, and diagnostic studies begun immediately if the shipment reaches the laboratory before the close of the workday. Overtime will be used to finish the examination: Specimens arriving after the close of the workday will be examined first thing the following day. Specimens received Saturday will be processed that day. Results will be reported by telephone to EP immediately upon completion of initial laboratory results.

Priority 3: Specimens will be processed according to accession order as received. Overtime will not be used for these investigations.

Specimen Submission Procedures

- The FedEx air bill tracking number is used to trace the specimens from the field to the laboratory. EP will promptly relay the air bill tracking number and the priority to the appropriate VS laboratory.
- All diagnostic specimens for a suspected FAD are shipped in a properly labeled U.S. Department of Agriculture Biological Specimen Mailer (bumble-bee box) and sent to either NVSL or FADDL.
- If more than one laboratory unit at NVSL is requested to perform diagnostic testing (e.g., virology, bacteriology, pathobiology, or toxicology), samples should be split and labeled for each laboratory unit. This expedites obtaining results for different diagnostic testing.
- All specimens should be packaged according to biosecurity procedures, identified, chilled with freezer gel-packs, and properly boxed for transit to the laboratory. **DO NOT USE DRY ICE.**

APPENDIX B

VETERINARY SERVICES MEMORANDUM NO. 580.4

- A completed and legible Specimen Submission Form (VS Form 10-4) must accompany all diagnostic specimens. Include a Specimen Submission Form in each Biological Specimen Mailer sent from NVSL. The Continuation Sheet for the Specimen Submission Form (VS Form 10-4A) should be used. The 10-4 Form should include the following information:
 - Investigation Control Number
 - Name and address of owner
 - Suspected disease(s)
 - Species involved
 - Brief history
 - Number of affected animals and number in a herd
- The specimen submission form is. To be placed on top of the Styrofoam lid under the cardboard top of the "bumble-bee" box, not inside the Styrofoam container with samples.
- **Do not** write "formalin" or "formaldehyde" on the FedEx form or shipping container. (The concentrations used do not constitute hazardous materials.)
- To: request extra media, contact the NVSL Shipping Department, telephone number (515) 2319-8530.

If there are any questions regarding shipping FAD specimens via FedEx, contact EP or call FedEx at 1-800-463-3339.

For specimen being sent to FADDL

1. Packages must be shipped via FedEx to the following address:

C/O: FADDL, APHIS at Plum Island
FedEx Distribution Center
450 Edwards Avenue
Calverton, NY 11933

NOTE: For all deliveries, mark the "HOLD WEEKDAY" or "HOLD SATURDAY" box.

2. Use the Area Billing number for the sender's FedEx account number obtained from the AVIC.
3. On the FedEx Form, Internal Billing Reference (Section 2), write the area accounting code obtained from the AVIC.
4. Check the FedEx Priority Overnight Box (Section 4a).
5. Saturday delivery should be marked for Priority 1 and 2 samples sent on Friday.
6. Keep the sender's copy of the Air bill for your records,:
7. The FADD or AVIC must notify EP when they are sending a sample. (EP or the: FADD/AVIC will notify the laboratory.)
8. Notification telephone numbers for FADDL are:

-Weekdays 8:30 a.m. to 5:00 pm: (516) 323:-2500 ext. 367 or 256 or 352.

-After hours or weekends - Dr, Lee Ann Thomas: Home (860) 767-1034 or Pager (888) 368-3004 (leave a message).

9. FADDL personnel will pick up samples and transport them to the laboratory.

For specimens being sent to NVSL. Ames. Iowa

1. Packages must be shipped via FedEx to the following address:

USDA, NVSL
1800 Dayton Road
Ames, Iowa 50010

2. Use the area billing number for the sender's FedEx account number.
3. On the FedEx Form, Internal Billing Reference (Section 2), write the area accounting code.
4. Check the FedEx Priority Overnight Box in Section 4 of the FedEx Form.
5. Saturday delivery should be marked for all samples sent on Fridays.
6. Keep the sender's copy of the FedEx Air Bill for your records.
7. The FADD or AVIC must notify EP that a sample is being sent (EP or the FADD/AVIC will notify the lab).
8. Notification telephone numbers for NVSL are:

Weekdays (8:00 a.m.-4:30 p.m.)

Virology	(515) 239-8551
Pathobiology	(515) 239-8521
Bacteriology	(515) 239-8563

After-hours

Dr. Schmitt	(515) 382-3140
Dr. Alstad	(515) 597-2347
Dr. Panigrahy	(515) 292-4960
Dr. Senne	(515) 296-2235
Dr. Pearson	(515) 292-3472 or (515) 755-2928

NAHRS Monthly State Report Form

The monthly State report form is a generic form, which requires the participant to indicate the State and month on the top of each page of the disease table. There are three columns in the disease table section of the form. The first provides the disease name and OIE number, the second allows the participant to indicate presence of confirmed clinical cases of the disease, and the third is for comments. The diseases are divided by commodity species and multiple species diseases are listed under each applicable species. The form is available in hard copy and electronic format.

Completed forms may be mailed, faxed, or e-mailed to CEAH. Reporting forms for a month are generally due the middle of the following month to allow for collection, review, and compilation of data by states.

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Form Approved
O.M.B. Number 0579-0079
Approval Expires 09/30/02

USDA: APHIS: VS
NRRC BLDG., B
Mail Stop 2E7
2150 Centre Avenue
Fort Collins, CO 80526

National Animal Health Reporting System Monthly State Report Form

Person completing the report:

Name:

Address:

Telephone:

FAX:

E-mail address:

How long did it take you to gather and summarize the data this month? _____

How long did it take you to complete the form this month? _____

These instructions refer to completion of this form by the State Veterinarian's office. The level of disease (presumptive versus definitive) reported to your office by laboratories should be taken into account and combined with other available information to determine whether the data fit the National Animal Health Reporting System (NAHRS) reporting criteria.

For each month, please report for the entire month. The report for each month is generally due by the 10th of the following month, specific submission dates are provided in the NAHRS time lines. If you receive reports on out-of-state submissions, **REPORT ONLY FOR YOUR OWN STATE**. Be sure to indicate the State and month for which you are reporting in the spaces provided on the top of each page of the form.

Complete the following confirmed clinical disease report after consulting the NAHRS disease reporting criteria for each disease. If a case meets the NAHRS criteria for presence of disease, record it as present. If a case does not meet the NAHRS criteria, you may use additional information to decide if you want to report the presence of confirmed clinical disease for the given month. REMEMBER, we are looking for presence data only and the disease reporting criteria are minimum standards. NOTE: For those diseases considered to be foreign to the United States (FAD), the default response is 'NO'. To report the presence of an FAD, change the 'NO' to 'YES'.

If you received a report of a case, which fits the NAHRS criteria, check **'YES'** under PRESENT. If you received a report of a case which does not fit the NAHRS criteria, but you have additional evidence to support the presence of confirmed clinical disease, check **'YES'** under PRESENT. In the COMMENTS column, please indicate the highest level of diagnostic criteria used in confirming a clinical case.

If you received no reports in the investigation of a suspected clinical disease which fit the NAHRS criteria and you have no further supporting evidence of the presence of confirmed clinical disease, check **'NO'** under PRESENT (e.g., all investigations for a given disease were negative or you received a positive serology report with no further supporting evidence to fit the NAHRS criteria). If the disease is considered reportable in your State (you would expect to receive a report if found), but you received no report which fits the NAHRS criteria, check **'NO'** under PRESENT.

Add any additional information that you feel may be of value in the COMMENTS column.

You will notice that the aquaculture diseases apply to COMMERCIAL FOOD FISH only. Please do not report any results for ORNAMENTAL OR WILD FISH.

You will notice that the avian diseases apply to COMMERCIAL POULTRY only and are not divided into CHICKEN, TURKEY, or DUCK flocks. If a BACKYARD flock is involved, please indicate in the comments. Do not report results for WILD OR PET birds.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0079. The time required to complete this information collection is estimated to average 4 hours per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection.

This form (6/00) replaces all previous forms.

STATE:	MONTH:		YEAR: 2000
OIE NUMBER - DISEASE NAME	PRESENT		COMMENTS
BOVINE	YES	NO	
A010-A018 Foot and Mouth Disease (FMD, Viruses O, A, C, SAT 1, SAT 2, SAT 3, Asia 1, or not typed)		x	
A020-A023 Vesicular Stomatitis (VS, Viruses Indiana, New Jersey, or not typed)			
A040 Rinderpest		x	
A060 Contagious Bovine Pleuropneumonia (<i>Mycoplasma mycoides mycoides</i>)		x	
A070 Lumpy Skin Disease		x	
A080 Rift Valley Fever		x	
A090 Bluetongue			
B051 Anthrax (<i>Bacillus anthracis</i>)			
B052 Aujeszky's Disease (Pseudorabies)			
B053 Echinococcosis/Hydatidosis			
B055 Heartwater (<i>Cowdria ruminantium</i>)		x	
B056 Leptospirosis			
B057 Q Fever (<i>Coxiella burnetti</i>)			
B058 Rabies			
B059 Paratuberculosis (Johne's Disease, <i>Mycobacterium paratuberculosis</i>)			
B060-B061 New and Old World Screwworm (<i>Cochliomyia (Callitroga) hominivorax</i> , <i>Chrysomya bezziana</i>)		x	
B101 Bovine Anaplasmosis (<i>Anaplasma marginale</i> , <i>A. centrale</i>)			
B102 Bovine Babesiosis (<i>Babesia bovis</i> , <i>B. bigemina</i>)		x	
B103 Bovine Brucellosis (<i>Brucella abortus</i>)			
B104 Bovine Genital Campylobacteriosis (<i>Campylobacter fetus venerealis</i>)			
B105 Bovine Tuberculosis (<i>Mycobacterium bovis</i>)			
B106 Bovine Cysticercosis (<i>Cysticercus bovis</i> metacestode stage of <i>Taenia saginata</i>)			
B107 Dermatophilosis (<i>Dermatophilus congolensis</i>)			
B108 Enzootic Bovine Leukosis (BLV)			
B109 Hemorrhagic Septicemia (<i>Pasteurella multocida</i> , B/Asian or E/African serotypes)			
B110 Infectious Bovine Rhinotracheitis/ Infectious Pustular Vulvovaginitis (IBR/IPV)			

B111 Theileriosis (<i>Theileria annulata</i> , <i>T. parva</i>)		x	
B112 Trichomonosis (<i>Trichomonas</i> (<i>Trichomonas</i>) <i>foetus</i>)			
B113 Trypanosomosis (<i>Trypanosoma congolense</i> , <i>T. vivax</i> , <i>T. brucei brucei</i>)		x	
B114 Malignant Catarrhal Fever (Bovine Malignant Catarrh, Wildebeest associated)			
B115 Bovine Spongiform Encephalopathy		x	
STATE:	MONTH:		YEAR: 2000
OIE NUMBER - DISEASE NAME	PRESENT		COMMENTS
CAPRINE AND OVINE	YES	NO	
A010-A018 Foot and Mouth Disease (FMD, Viruses O, A, C, SAT 1, SAT 2, SAT 3, Asia 1, or not typed)		x	
A040 Rinderpest		x	
A050 Peste des Petits Ruminants		x	
A080 Rift Valley Fever		x	
A090 Bluetongue			
A100 Sheep Pox and Goat Pox		x	
B051 Anthrax (<i>Bacillus anthracis</i>)			
B052 Aujeszky's Disease (Pseudorabies)			
B053 Echinococcosis/Hydatidosis			
B055 Heartwater (<i>Cowdria ruminantium</i>)		x	
B056 Leptospirosis			
B057 Q Fever (<i>Coxiella burnetti</i>)			
B058 Rabies			
B059 Paratuberculosis (Johne's Disease, <i>Mycobacterium paratuberculosis</i>)			
B060-B061 New and Old World Screwworm (<i>Cochliomyia</i> (<i>Callitroga</i>) <i>hominivorax</i> , <i>Chrysomya bezziana</i>)		x	
B151 Ovine Epididymitis (<i>Brucella ovis</i> infection)			
B152 Caprine and Ovine Brucellosis (excluding <i>B. ovis</i>)			
B153 Caprine Arthritis/Encephalitis (CAE)			
B154 Contagious Agalactia (<i>Mycoplasma agalactiae</i> , <i>M. capricolum capricolum</i> , <i>M. putrefaciens</i> , <i>M. mycoides mycoides</i> , <i>M. mycoides mycoides</i> LC)			

STATE:	MONTH:		YEAR: 2000
OIE NUMBER - DISEASE NAME	PRESENT		COMMENTS
CAPRINE AND OVINE (CONTINUED)	YES	NO	
B155 Contagious Caprine Pleuropneumonia (<i>Mycoplasma capricolum capripneumoniae</i>)		x	
B156 Enzootic Abortion of Ewes (Ovine Psittacosis, <i>Chlamydia psittaci</i>)			
B157 Ovine Pulmonary Adenomatosis			
B158 Nairobi Sheep Disease		x	
B159 Salmonellosis (<i>Salmonella abortusovis</i>)			
B160 Scrapie			
B161 Maedi-Visna/Ovine Progressive Pneumonia			
STATE:	MONTH:		YEAR: 2000
OIE NUMBER - DISEASE NAME	PRESENT		COMMENTS
EQUINE	YES	NO	
A020-A023 Vesicular Stomatitis (VS, Viruses Indiana, New Jersey, or not typed)			
A110 African Horse Sickness		x	
B051 Anthrax (<i>Bacillus anthracis</i>)			
B056 Leptospirosis			
B058 Rabies			
B060-B061 New and Old World Screwworm (<i>Cochliomyia (Callitroga) hominivorax</i> , <i>Chrysomya bezziana</i>)		x	
B201 Contagious Equine Metritis (<i>Taylorella equigenitalis</i>)			
B202 Dourine (<i>Trypanosoma equiperdum</i>)		x	
B203 Epizootic Lymphangitis (<i>Histoplasma farciminosum</i>)		x	
B204 Equine Encephalomyelitis (Eastern and Western)			
B205 Equine Infectious Anemia (EIA)			
B206 Equine Influenza (Virus Type A)			
B207 Equine Piroplasmiasis (Babesiosis, <i>Babesia (Piroplasma) equi</i> , <i>B. caballi</i>)		x	
B208 Equine Rhinopneumonitis (1 and 4)			
B209 Glanders (<i>Pseudomonas mallei</i>)		x	
B210 Horse Pox		x	
B211 Equine Viral Arteritis (EVA)			
B212 Japanese Encephalitis		x	
B213 Horse Mange			
B215 Surra (<i>Trypanosoma evansi</i>)		x	

B216 Venezuelan Equine Encephalomyelitis		x	
STATE:	MONTH:		YEAR: 2000
OIE NUMBER - DISEASE NAME	PRESENT		COMMENTS
PORCINE	YES	NO	
A010-A018 Foot and Mouth Disease (FMD, Viruses O, A, C, SAT 1, SAT 2, SAT 3, Asia 1, or not typed)		x	
A020-A023 Vesicular Stomatitis (VS, Viruses Indiana, New Jersey, or not typed)			
A030 Swine Vesicular Disease		x	
A120 African Swine Fever		x	
A130 Classical Swine Fever (Hog Cholera)		x	
B051 Anthrax (<i>Bacillus anthracis</i>)			
B052 Aujeszky's Disease (Pseudorabies)			
B053 Echinococcosis/Hydatidosis			
B056 Leptospirosis			
B058 Rabies			
B060-B061 New and Old World Screwworm (<i>Cochliomyia (Callitroga) hominivorax</i> , <i>Chrysomya bezziana</i>)		x	
B251 Atrophic Rhinitis of Swine (<i>Bordetella bronchiseptica</i> , <i>Pasteurella multocida</i>)			
B252 Porcine Cysticercosis (<i>Cysticercus cellulosae</i> metacestode stage of <i>Taenia solium</i>)			
B253 Porcine Brucellosis (<i>Brucella suis</i>)			
B254 Transmissible Gastroenteritis (TGE)			
B062 Trichinellosis (<i>Trichinella spiralis</i>)			
B256 Enterovirus Encephalomyelitis		x	
B257 Porcine Reproductive and Respiratory Syndrome (PRRS)			

STATE:	MONTH:		YEAR: 2000
OIE NUMBER - DISEASE NAME	PRESENT		COMMENTS
COMMERCIAL POULTRY	YES	NO	
A150 Fowl Plague (Highly Pathogenic Avian Influenza)		x	
A160 Newcastle Disease (Exotic)		x	
B301 Avian Infectious Bronchitis			
B302 Avian Infectious Laryngotracheitis			
B303 Avian Tuberculosis (<i>Mycobacterium avium</i>)			
B304 Duck Virus Hepatitis			
B305 Duck Virus Enteritis			

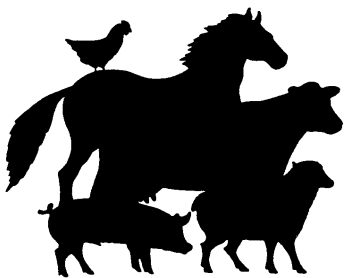
B306 Fowl Cholera (<i>Pasteurella multocida</i>)			
B307 Fowl Pox			
B308 Fowl Typhoid (<i>Salmonella gallinarum</i>)			
B309 Infectious Bursal Disease (Gumboro Disease)			
B310 Marek's Disease			
B311 Avian Mycoplasmosis (<i>Mycoplasma gallisepticum</i>)			
B312 Avian Chlamydiosis (Psittacosis and Ornithosis, <i>Chlamydia psittaci</i>)			
B313 Pullorum Disease (<i>Salmonella pullorum</i>)			
COMMERCIAL FOOD FISH	YES	NO	COMMENTS
B401 Viral Hemorrhagic Septicemia			
B404 Spring Viremia of Carp			
B405 Infectious Hematopoietic Necrosis			
B413 Epizootic Hematopoietic Necrosis			
B415 <i>Oncorhynchus masou</i> Virus Disease			

This form (6/00) replaces all previous forms.

NAHRS National Annual Summary Template

The National annual summary is distributed to participating States and APHIS personnel. The summary is used for completing OIE reports, trade negotiations and to support local and national animal health program decisions.

The National Animal Health Reporting System (NAHRS) Annual Summary Report Template



The National Animal Health Reporting System (NAHRS) is a passive reporting system that gathers data on the presence of confirmed clinical disease for the Office International des Epizooties (OIE) Lists A and B of cattle, sheep and goats, equine, swine, avian species, and aquaculture species. Data are provided by the State Veterinarian of participating States in a collaborative program with the American Association of Veterinary Laboratory Diagnosticians (AAVLD),

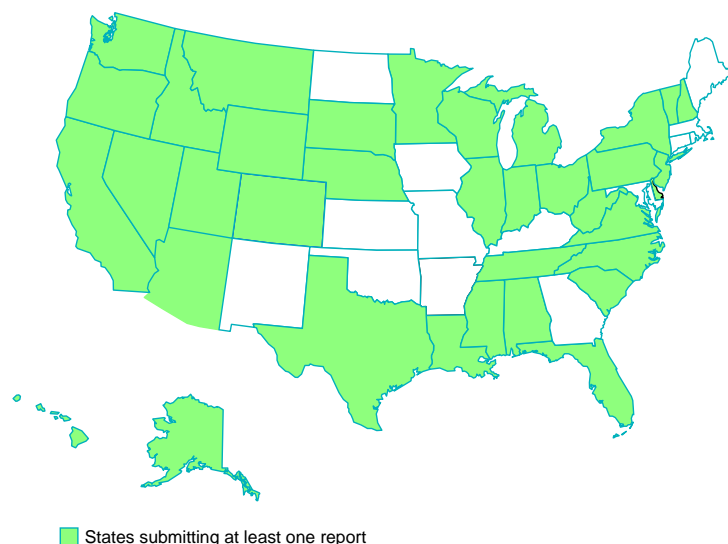
NAHRS UMR -59

the US Animal Health Association (USAHA) and the USDA:Animal and Plant Health Inspection Service (APHIS). The NAHRS is one source of information used in the completion of OIE reports by the USDA:APHIS:Veterinary Services (VS).

Reporting criteria established for the NAHRS are used to determine the presence of disease. State Veterinarians gather data from many sources, including, but not limited to, veterinary diagnostic laboratories. An underlying assumption of the NAHRS is that there are certain diseases that are so easily recognized by producers and practitioners, that diagnostic samples are rarely submitted for laboratory confirmation. Therefore, the State Veterinarian may decide to report the presence of a disease based on information other than, or in addition to, laboratory test results.

The following OIE List A and B diseases are considered by USDA:APHIS:VS to be foreign to the United States: List A - Foot and Mouth Disease, Rinderpest, Contagious Bovine Pleuropneumonia, Lumpy Skin Disease, Rift Valley Fever, Peste des Petits Ruminants, Sheep Pox and Goat Pox, African Horse Sickness, Swine Vesicular Disease, African Swine Fever, Classical Swine Fever, Highly Pathogenic Avian Influenza, and Exotic Newcastle Disease. List B - Heartwater, Screwworm, Bovine Babesiosis, Theileriosis, Trypanosomosis, Bovine Spongiform Encephalopathy, Contagious Caprine Pleuropneumonia, Nairobi Sheep Disease, Dourine, Epizootic Lymphangitis, Equine Piroplasmosis, Glanders, Horse Pox, Japanese Encephalitis, Surra, Venezuelan Equine Encephalomyelitis, and Enterovirus Encephalomyelitis. Sources: U.S. annual reports to OIE, U.S. *Federal Code of Regulations* and USAHA *Foreign Animal Diseases*.

A total of 36 States have submitted at least one report to the NAHRS in 2002. Several States are in the process of finalizing preparations for reporting.



The following disease summary table reports two epidemiological values for each disease. Presence- Months is the sum across all States of months in which confirmed clinical disease was reported as present. Report- Months is the sum across all States of months in which a report was received. For example, if eight States submitted reports all 12 months (96 Report-Months) and seven States submitted 10 of the 12 months (70 Report- Months) then the total Report- Months is 166. If disease X is reported, present 5 times by the 15 reporting States in the 166 Report- Months, then the total Presence- Months is 5.

OIE #	DISEASE	Presence-Months	Report-Months
		Jan - Dec, 2002	Jan - Dec, 2002
BOVINE			
A010	Foot and Mouth Disease (O, A, C, SAT 1, SAT 2, SAT 3, Asia 1, or not typed)		
A020	Vesicular Stomatitis (Indiana, New Jersey, or not typed)		
A040	Rinderpest		
A060	Contagious Bovine Pleuropneumonia (<i>Mycoplasma mycoides mycoides</i>)		
A070	Lumpy Skin Disease		
A080	Rift Valley Fever		
A090	Bluetongue		
B051	Anthrax (<i>Bacillus anthracis</i>)		
B052	Pseudorabies (Aujeszky's Disease)		
B053	Echinococcosis/Hydatidosis		
B055	Heartwater (<i>Cowdria ruminantium</i>)		
B056	Leptospirosis		
B057	Q Fever (<i>Coxiella burnetti</i>)		
B058	Rabies		
B059	Paratuberculosis (Johne's, <i>Mycobacterium paratuberculosis</i>)		
B060	New and Old World Screwworm (<i>Cochliomya hominivorax</i> , B061 <i>Chrysomya bezziana</i>)		
B101	Bovine Anaplasmosis (<i>Anaplasma marginale</i> , <i>A. centrale</i>)		
B102	Bovine Babesiosis (<i>Babesia bovis</i> , <i>B. bigemina</i>)		
B103	Bovine Brucellosis (<i>Brucella abortus</i>)		
B104	Bovine Genital Campylobacteriosis (<i>Campylobacter fetus venerealis</i>)		
B105	Bovine Tuberculosis (<i>Mycobacterium bovis</i>)		
B106	Bovine Cysticercosis (<i>Cysticercus bovis</i> metacestode stage of <i>Taenia saginata</i>)		
B107	Dermatophilosis (<i>Dermatophilus congolensis</i>)		
B108	Enzootic Bovine Leukosis		
B109	Hemorrhagic Septicemia (<i>Pasteurella multocida</i> serotype B/Asian or E/African)		
B110	Infectious Bovine Rhinotracheitis/Infectious Pustular Vulvovaginitis		
B111	Theileriosis (<i>Theileria annulata</i> , <i>T. parva</i>)		
B112	Trichomonosis (<i>Trichomonas foetus</i>)		
B113	Trypanosomosis (<i>Trypanosoma congolense</i> , <i>T. vivax</i> , <i>T. brucei brucei</i>)		
B114	Malignant Catarrhal Fever (Wildebeest associated)		
B115	Bovine Spongiform Encephalopathy		
CAPRINE/OVINE			
A010	Foot and Mouth Disease (O, A, C, SAT 1, SAT 2, SAT 3, Asia 1, or not typed)		
A040	Rinderpest		
A050	Peste des Petits Ruminants		
A080	Rift Valley Fever		
A090	Bluetongue		
A100	Sheep Pox and Goat Pox		
B051	Anthrax (<i>Bacillus anthracis</i>)		

B052	Pseudorabies (Aujeszky's Disease)		
B053	Echinococcosis/Hydatidosis		
B055	Heartwater (<i>Cowdria ruminantium</i>)		
B056	Leptospirosis		
B057	Q Fever (<i>Coxiella burnetti</i>)		
B058	Rabies		
B059	Paratuberculosis (Johne's, <i>Mycobacterium paratuberculosis</i>)		
B060	New and Old World Screwworm (<i>Cochliomya hominivorax</i> ,		
B061	<i>Chrysomya bezziana</i>)		
B151	Ovine Epididymitis (<i>Brucella ovis</i> infection)		
B152	Caprine and Ovine Brucellosis (excluding <i>B. ovis</i>)		
B153	Caprine Arthritis/Encephalitis		
B154	Contagious Agalactia (<i>Mycoplasma agalactiae</i> , <i>M. capricolum capricolum</i> , <i>M. putrefaciens</i> , <i>M. mycoides mycoides</i> , <i>M. mycoides mycoides</i> LC)		
B155	Contagious Caprine Pleuropneumonia (<i>Mycoplasma capricolum capripneumoniae</i>)		
B156	Enzootic Abortion of Ewes (<i>Chlamydia psittaci</i>)		
B157	Ovine Pulmonary Adenomatosis		
B158	Nairobi Sheep Disease		
B159	Salmonellosis (<i>Salmonella abortusovis</i>)		
B160	Scrapie		
B161	Maedi-Visna/Ovine Progressive Pneumonia		
EQUINE			
A020	Vesicular Stomatitis (Indiana, New Jersey, or not typed)		
A110	African Horse Sickness		
B051	Anthrax (<i>Bacillus anthracis</i>)		
B056	Leptospirosis		
B058	Rabies		
B060	New and Old World Screwworm (<i>Cochliomya hominivorax</i> ,		
B061	<i>Chrysomya bezziana</i>)		
B201	Contagious Equine Metritis (<i>Taylorella equigenitalis</i>)		
B202	Dourine (<i>Trypanosoma equiperdum</i>)		
B203	Epizootic Lymphangitis (<i>Histoplasma farciminosum</i>)		
B204	Equine Encephalomyelitis (Eastern and Western)		
B205	Equine Infectious Anemia		
B206	Equine Influenza (Type A)		
B207	Equine Piroplasmiasis (<i>Babesia equi</i> , <i>B. caballi</i>)		
B208	Equine Rhinopneumonitis (1 and 4)		
B209	Glanders (<i>Pseudomonas mallei</i>)		
B210	Horse Pox		
B211	Equine Viral Arteritis		
B212	Japanese Encephalitis		
B213	Horse Mange		
B215	Surra (<i>Trypanosoma evansi</i>)		
B216	Venezuelan Equine Encephalomyelitis		
PORCINE			
A010	Foot and Mouth Disease (O, A, C, SAT 1, SAT 2, SAT 3, Asia 1, or not typed)		
A020	Vesicular Stomatitis (Indiana, New Jersey, or not typed)		

A030	Swine Vesicular Disease		
A120	African Swine Fever		
A130	Classical Swine Fever (Hog Cholera)		
B051	Anthrax (<i>Bacillus anthracis</i>)		
B052	Pseudorabies (Aujeszky's Disease)		
B053	Echinococcosis/Hydatidosis		
B056	Leptospirosis		
B058	Rabies		
B060	New and Old World Screwworm (<i>Cochliomya hominivorax</i> ,		
B061	<i>Chrysomya bezziana</i>)		
B251	Atrophic Rhinitis of Swine (<i>Bordetella bronchiseptica</i> , <i>Pasteurella multocida</i>)		
B252	Porcine Cysticercosis (<i>Cysticercus cellulosae</i> metacestode stage of <i>Taenia solium</i>)		
B253	Porcine Brucellosis (<i>Brucella suis</i>)		
B254	Transmissible Gastroenteritis		
B062	Trichinellosis (<i>Trichinella spiralis</i>)		
B256	Enterovirus Encephalomyelitis		
B257	Porcine Reproductive and Respiratory Syndrome		
COMMERCIAL POULTRY			
A150	Highly Pathogenic Avian Influenza (Fowl Plague)		
A160	Newcastle Disease (Exotic)		
B301	Avian Infectious Bronchitis		
B302	Avian Infectious Laryngotracheitis		
B303	Avian Tuberculosis (<i>Mycobacterium avium</i>)		
B304	Duck Virus Hepatitis		
B305	Duck Virus Enteritis		
B306	Fowl Cholera (<i>Pasteurella multocida</i>)		
B307	Fowl Pox		
B308	Fowl Typhoid (<i>Salmonella gallinarum</i>)		
B309	Infectious Bursal Disease (Gumboro Disease)		
B310	Marek's Disease		
B311	Avian Mycoplasmosis (<i>Mycoplasma gallisepticum</i>)		
B312	Avian Chlamydiosis (Psittacosis and Ornithosis, <i>Chlamydia psittaci</i>)		
B313	Pullorum Disease (<i>Salmonella pullorum</i>)		
COMMERCIAL FOOD FISH			
B401	Viral Hemorrhagic Septicemia		
B404	Spring Viremia of Carp		
B405	Infectious Hematopoietic Necrosis		
B413	Epizootic Hematopoietic Necrosis		
B415	<i>Oncorhynchus masou</i> Virus Disease		